



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

WATANABE MITSUO, ET AL.

: EXAMINER: AUGHENBAUGH, W.

SERIAL NO: 09/700,908 :

FILED: NOVEMBER 21, 2000

: GROUP ART UNIT: 001772

FOR: SYNTHETIC RESIN MOLDED
ARTICLE AND PROCESS FOR
PRODUCING THE SAME

DECLARATION UNDER 37 C.F.R. § 1.132

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Now comes Tsuyoshi Fujiwara, who deposes and states that

1. I am a graduate of Gumma University and received my degree in the year of 1984.

2. I have been employed by Ryumai Plastic Ltd., predecessor of RP Topla Ltd., since 1984, and I had been conducting design and research in the field of injection molding technique from 1984 to 1997, and conducting research and development in research and development center from 1997 to 2001. I have been conducting design and research in the field of injection molding technique since 2001.

3. I am familiar with the prosecution history of U.S. Application Serial No. 09/700,908 and I understand the rejection of Claims 25, 11, 12 and 16 under 35 U.S.C. § 102, second paragraph, Claim 14 under 35 U.S.C. § 103,

first paragraph, Claim 15 under 35 U.S.C. § 103, first paragraph and Claim 17 under 35 U.S.C. § 103, first paragraph of the Office Action of September 30, 2004, reiterated in the Advisory Action of May 21, 2003.

4. (1) The notation, "Injection pressure: 110 kg/cm²" in page 23 is pressure of hydraulic circuit of the molding machine.

(2) The notation, "the injection pressure (about 200 to 1000 kgf/cm²)" in page 29 is resin pressure. In molding the product of the present application, 3300 Ton of the mold clamping pressure (4140 Ton in the specification) was required. The average injection pressure inside the mold was 293 kgf/cm² which was derived from the mold clamping pressure 3300 Ton / project area of molded article (width of 750 mm x 1500 mm). In general, since there is a loss of pressure in such as a heating cylinder nozzle, runner and gate with respect to injection molding, the injection pressure is approximately 1000 kgf/cm² partially.

(3) On the other hand, through molding the product of the present invention by mixing the foaming agent into the molding materials, it was possible to mold the product by reducing the mold clamping pressure to 1800 Ton. The average injection pressure inside the mold was 160 kgf/cm² which was derived from 1800 Ton / project area of molded article (width of 750 mm x 1500 mm). Accordingly, from the above-mentioned (1) to (3), it is concluded that Nakagawa's coat reinforcement consist of a thermoplastic foam which is precluded by the injection condition in the recitation of Claim 27 where the outer reinforcing shell layer is formed by injection molding at an injection pressure of 200 to 1000 kgf/cm².

5. The undersigned Declarant declares further that all the statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

January 20, 2005
Date

T. Fujiwara
Tsuyoshi Fujiwara, Inventor